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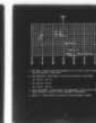
ARMY ELECTRONICS COMMAND WHITE SANDS MISSILE RANGE N--ETC F/G 4/2
19702A GSRS, MISSILE NUMBER N/A, ROUND NUMBER B-6/B-7 (26 MARCH--ETC(U)
MAR 79

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21. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 19702A GSRS, Missile Number N/A, Round Number R-6/B-7, are presented in tabular form.			

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INTRODUCTION

GSRS 19702A (FF), Missile Number(s) N/A, Round Number(s) B-6 and B-7, were launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1445 and 1545 MST, 26 March 1979. The scheduled launch time(s) were 1445 and 1545 MST.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature (°C), relative humidity, dew point (°C), density (gm/m³), wind direction, wind velocity and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole mounted and tower mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

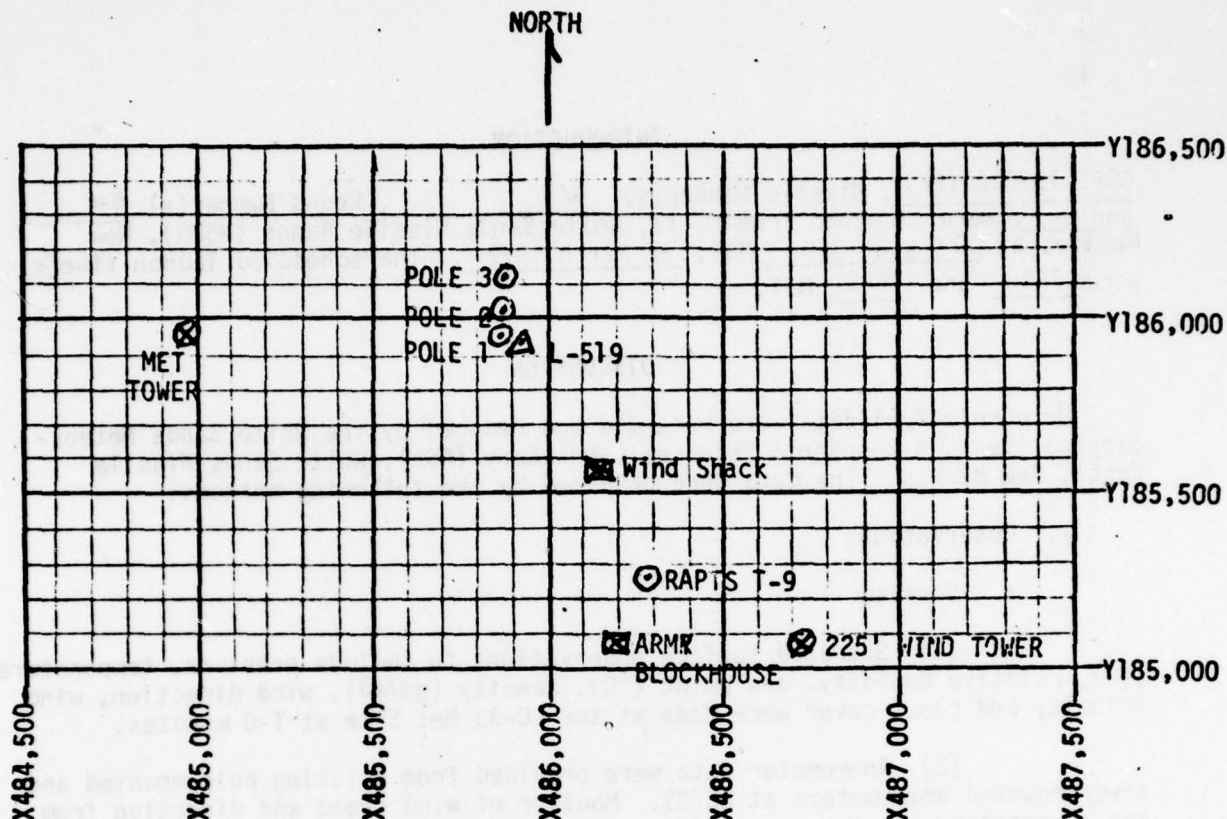
b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at T-0 mins as follows:

SITE AND ALTITUDE

LC-33 1 kilometer (50 meter inc)

(2) Air structure data (rawinsonde) were collected at the SMR Met Site at T-0 minutes. Data were collected from surface to 125% of apogee in 500-foot increments.



1. MET TOWER - 4 Bendix Model T-120 Anemometers at 12 ft, 62 ft, 102 ft and 202 ft with E/A recorders in Wind Shack.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders in Wind Shack
 - (a) Pole #1 - 38.7 ft
 - (b) Pole #2 - 53.0 ft
 - (c) Pole #3 - 83.6 ft
3. 225 FT WIND TOWER - 5 Bendix Model T-120 Anemometers at 35 ft, 88 ft, 128 ft, 168 ft and 200 ft with 5 X-Y visual indicators in Blockhouse.
4. RAPTS T-9 - Radar Automatic Pilot-Balloon Tracking System T-9 Radar

The data are presented in the following tabulations:

ELEVATION	3977.30	FEET/MSL
PRESSURE	875.2	MBS
TEMPERATURE	23.3	°C
RELATIVE HUMIDITY	17	%
DEW POINT	-3.5	°C
DENSITY	1025	GM/M ³
WIND SPEED	12	MPH
WIND DIRECTION	260	DEGREES
CLOUD COVER	2	CI

TABLE 1. SURFACE OBSERVATIONS TAKEN AT LC-33
AT 1445 MST, 26 MARCH 1979
19702A GSRS, MISSILE NUMBER N/A
ROUND NUMBER B-6

ELEVATION	3977.30	FEET/MSL
PRESSURE	875.2	MBS
TEMPERATURE	23.8	°C
RELATIVE HUMIDITY	13	%
DEW POINT	-6.3	°C
DENSITY	1023	GM/M ³
WIND SPEED	10	MPH
WIND DIRECTION	270	DEGREES
CLOUD COVER	7	ci

TABLE 2. SURFACE OBSERVATIONS TAKEN AT LC-33
 AT 1545 MST, 26 MARCH 1979
 19702A GSRS, MISSILE NUMBER N/A
 ROUND NUMBER B-7

LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1 12 ft			LEVEL #2 62 ft		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	295	9.0	-30	280	10.0
-20	290	8.0	-20	285	14.0
-10	270	9.0	-10	267	11.0
0.0	275	9.0	0.0	275	10.0
+10	270	9.5	+10	290	13.0
LEVEL #3 102 ft			LEVEL #4 202 ft		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	295	11.5	-30	280	12.0
-20	285	12.0	-20	255	11.0
-10	260	10.5	-10	245	12.0
0.0	250	9.0	0.0	270	12.0
+10	273	11.0	+10	260	13.0

WTSM COORDINATES: X484,982.64, Y185,957.73, H3983.00 (base)

TABLE 3

TYPE 19702A GSRS MISSILE NO. N/A ROUND NO. B-6

LAUNCHED FROM LC-33 DATE 26 March 1979 TIME 1445 MST

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH _____

OR TRUE NORTH TRUE NORTH

PILOT BALLOON MEASURED WIND DATA

HEIGHT METERS	DIRECTION DEGREES	SPEED MPH
SUR	255	10.0
50	291	10.0
100	303	21.0
150	238	23.0
200	284	20.0
250	271	18.0
300	277	22.0
350	294	21.0
400	279	17.0
450	277	14.0
500	277	14.5

HEIGHT METERS	DIRECTION DEGREES	SPEED MPH
550	283	19.0
600	284	15.0
650	272	17.0
700	276	15.0
750	258	9.0
800	249	12.0
850	276	10.5
900	268	12.5
950	257	12.0
1000	256	13.0
1050		

TABLE 4

RELEASED FROM LC-33 DATE 26 March 1979 TIME 1435 LST
 RELEASE POINT COORDINATES (WTSN) X = 486,037.24 Y = 182,350.16 H = 3977.30
 MISSILE TYPE 19702A GSRS MISSILE NO. N/A ROUND NO. B-6
 MISSILE LAUNCHED FROM LC-33 DATE 26 March 1979 TIME 1445 LST
 NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH _____
 OR TRUE NORTH TRUE NORTH.

PILOT BALLOON MEASURED WIND DATA

HEIGHT METERS	DIRECTION DEGREES	SPEED MPH
SUR	260	12.0
50	265	9.0
100	263	5.0
150	265	12.0
200	258	10.0
250	292	7.5
300	292	14.0
350	296	15.0
400	301	17.0
450	290	15.5
500	293	15.5

HEIGHT METERS	DIRECTION DEGREES	SPEED MPH
550	294	15.0
600	287	15.5
650	288	16.0
700	283	15.5
750	269	15.0
800	279	16.0
850	285	17.0
900	285	16.0
950	289	15.5
1000	271	11.0
1050		

TABLE 5

RELEASED FROM LC-33 DATE 26 March 1979 TIME 1445 LST

RELEASE POINT COORDINATES (WSTM) X = 486,047.24 Y = 182,350.16 H = 3977.30

MISSILE TYPE 19702A GSRS MISSILE NO. N/A ROUND NO. B-6

MISSILE LAUNCHED FROM LC-33 DATE 26 March 1979 TIME 1445 LST

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH

OR TRUE NORTH TRUE NORTH

LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	280	14.0	-30	295	7.5	-30	282	16.0
-20	288	11.0	-20	300	9.0	-20	265	13.0
-10	290	13.0	-10	310	6.5	-10	285	16.5
0.0	280	14.5	0.0	305	7.5	0.0	275	15.5
+10	277	13.0	+10	300	8.0	+10	280	17.5

POLE #1 = X425,374.29 Y185,58.90 H4018.74 32.7 ft. AGL

POLE #2 = X485,174.93 Y186,012.00 H4033.57 53.0 ft. AGL

POLE #3 = X485,577.29 Y186,116.00 H4063.92 83.6 ft. AGL

TABLE 6

TYPE 19702A GSPS MISSILE NO. N/A ROUND NO. B-6

LAUNCHED FROM LC-33 DATE 20 March 1979 TIME 1445 LST

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH _____

OR TRUE NORTH TRUE NORTH.

LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WINDS (202 FT TOWER)

LEVEL #1 12 ft			LEVEL #2 62 ft		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	270	15.0	-30	280	19.0
-20	285	12.0	-20	275	20.0
-10	275	14.0	-10	270	18.0
0.0	275	13.0	0.0	280	15.5
+10	265	11.0	+10	275	18.0
LEVEL #3 102 ft			LEVEL #4 202 ft		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	275	18.0	-30	265	18.0
-20	280	17.0	-20	268	16.5
-10	270	18.0	-10	260	17.5
0.0	280	17.5	0.0	260	19.0
+10	275	19.0	+10	260	18.5

TABLE 7

TYPE 19702A GSRS MISSILE NO. N/A ROUND NO. B-7
 LAUNCHED FROM LC-33 DATE 26 Mar 79 TIME 1545 MST
 NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH _____
 OR TRUE NORTH TRUE NORTH.

PILOT BALLOON MEASURED WIND DATA

HEIGHT METERS	DIRECTION DEGREES	SPEED MPH
SUR	270	10.0
50	272	8.0
100	290	5.0
150	272	15.5
200	267	13.8
250	268	14.8
300	265	15.0
350	268	13.0
400	263	15.0
450	272	16.0
500	269	17.5

HEIGHT METERS	DIRECTION DEGREES	SPEED MPH
550	270	17.0
600	257	15.0
650	265	15.0
700	259	15.5
750	253	15.0
800	262	15.5
850	261	16.0
900	268	11.0
950	262	12.0
1000	262	11.5
1050		

TABLE 2

RELEASED FROM LC-33 DATE 26 Mar 79 TIME 1545 LST

RELEASE POINT COORDINATES (WSTM) X = 486, 37.24 Y = 182, 50.16 H = 3977.30

MISSILE TYPE 19702A GSRS MISSILE NO. N/A ROUND NO. B-7

MISSILE LAUNCHED FROM LC-33 DATE 26 Mar 79 TIME 1545 LST

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH

OR TRUE NORTH TRUE NORTH .

PILOT BALLOON MEASURED WIND DATA

HEIGHT METERS	DIRECTION DEGREES	SPEED MPH
SUR	240	6.0
50	260	5.0
100	266	7.0
150	269	19.0
200	270	17.0
250	264	18.0
300	270	18.5
350	270	19.0
400	272	17.5
450	261	17.0
500	265	18.5

HEIGHT METERS	DIRECTION DEGREES	SPEED MPH
550	272	18.5
600	275	18.5
650	255	17.0
700	247	17.0
750	249	18.0
800	250	17.0
850	250	18.0
900	259	21.0
950	259	17.0
1000	245	18.0
1050		

TABLE 9

RELEASED FROM LC-33 DATE 26 Mar 79 TIME 1535 LST

RELEASE POINT COORDINATES (WSTM) X = 486,037.24 Y = 182,350.16 H = 3977.30

MISSILE TYPE 19702A GSRS MISSILE NO. N/A ROUND NO. B-7

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH _____

OR TRUE NORTH TRUE NORTH.

LC-33 FIXED POLE ANEMOMETER MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	206	19.0	-30	288	14.0	-30	275	20.0
-20	268	21.0	-20	288	14.5	-20	260	23.0
-10	270	18.0	-10	290	11.5	-10	275	21.0
0.0	275	15.5	0.0	285	11.0	0.0	270	22.0
+10	273	16.0	+10	300	7.5	+10	270	21.5

POLE #1 = X485,874.29 Y185,058.90 H4018.74 38.7 ft. AGL

POLE #2 = X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL

POLE #3 = X485,377.29 Y186,116.06 H4063.92 83.6 ft. AGL

TABLE 10

TYPE 19702A GSRS MISSILE NO. N/A ROUND NO. B-7

LAUNCHED FROM LC-33 DATE 26 Mar 79 TIME 1545 LST

NOTE: WIND DIRECTIONS ARE REFERENCED TO THE FIRING AZIMUTH _____

OR TRUE NORTH TRUE NORTH.

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

SIGNIFICANT LEVEL DATA
 085000Z051
 S M R

STATION ALTITUDE 3997.30 FEET MSL
 26 MAR. 79 1515 MRS MST
 ASCENSION NO. 31

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	TEMPERATURE DEWPOINT	REL. HUM.
MILLIBARS	MSL FEET	DEGREES	CENTIGRADE	PERCENT
874.2	3997.3	20.7	-5.2	17.0
850.0	4739.0	18.3	-5.0	20.0
805.2	6297.7	13.7	-7.0	23.0
745.6	8401.1	7.7	-11.1	25.0
700.0	10093.1	2.5	-12.9	31.0
678.8	10207.0	.6	-15.6	28.0
669.6	11266.9	.6	-18.0	22.0
615.6	13405.2	-4.1	-21.2	25.0
593.0	14215.7	-5.0	-23.9	21.0
580.8	14267.3	-6.7	-21.0	31.0
541.0	16776.1	-10.8	-20.1	46.0
505.8	18484.6	-14.7	-23.5	47.0
500.0	18731.5	-15.4	-24.4	46.0
481.6	19679.8	-17.1	-23.2	34.0
458.2	20901.5	-20.2	-30.0	41.0
400.0	24157.0	-28.8	-37.6	42.0
392.4	24607.9	-29.8	-39.0	40.0
335.6	25017.2	-30.8	-36.3	57.0
313.2	27132.0	-35.7	-43.9	47.0
300.0	29701.9	-42.5	-46.4	46.0
277.4	30755.3	-44.6		
250.0	32423.4	-49.4		
228.0	34843.3	-54.3		
208.0	36570.0	-58.4		
200.0	36455.9	-61.9		
184.4	39235.9	-62.2		
158.4	40908.2	-62.5		
154.2	44022.7	-57.9		
150.0	44529.9	-53.9		
135.0	45131.6	-58.6		
123.8	47339.1	-59.7		
113.2	49113.8	-62.3		
110.0	50058.9	-61.3		
106.6	51513.4	-64.0		
100.0	52132.6	-63.4		
84.8	53443.7	-64.8		
70.0	56039.0	-61.4		
50.0	60705.7	-63.7		
42.0	67506.3	-65.8		
	71166.3	-58.9		

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

SIGNIFICANT LEVEL DATA
 0850000051
 S M R

STATION ALTITUDE 3997.30 FEET MSL
 26 MAR. 79 1515 HRS MST
 ASCENSION NO. 51

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT
38.4	73006.7	-53.9		
33.6	75395.2	-54.9		
30.0	76313.5	-50.8		
25.0	82259.8	-48.7		
23.8	83355.2	-50.6		
20.0	87122.6	-45.3		
17.8	89698.9	-45.0		
16.0	92000.1	-40.7		

STATION ALTITUDE 3497.30 FEET MSL
25 MAR. 79 1515 HRS MST
ASCENSION NO. 51

UPPER AIR DATA
085005' 051
S M R

GEODETIC COORDINATES
32.46034 LAT DEG
106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	TEMPERATURE DEWPOINT CELSIUS	REL. HUM. PERCENT	DENSITY G/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TR) SPEED KNOTS	INDEX OF REFRACTION
3997.3	874.2	20.7	-5.2	17.0	1034.5	668.4	210.0	1.000249
4000.0	874.1	20.7	-5.2	17.0	1034.5	668.4	210.0	1.000249
4500.0	858.0	19.2	-5.0	18.9	1021.5	660.7	210.5	1.000246
5000.0	843.6	17.7	-5.3	20.4	1008.7	650.0	222.7	1.000243
5500.0	828.6	16.1	-5.9	21.4	996.0	643.2	226.6	1.000240
6000.0	813.0	14.6	-6.6	22.4	983.0	631.4	229.6	1.000236
6500.0	799.3	13.1	-7.4	23.2	971.0	619.7	231.0	1.000233
7000.0	784.8	11.7	-8.3	23.7	958.3	608.0	234.1	1.000229
7500.0	770.6	10.3	-9.3	24.1	945.7	600.3	237.4	1.000225
8000.0	756.0	8.8	-10.3	24.6	933.4	594.7	244.6	1.000221
8500.0	742.9	7.4	-11.1	25.4	921.2	583.0	253.5	1.000218
9000.0	729.1	5.9	-11.6	27.1	909.2	551.2	258.0	1.000215
9500.0	715.7	4.3	-12.2	28.9	897.4	549.4	261.2	1.000212
10000.0	702.4	2.8	-12.8	30.7	885.7	547.5	260.7	1.000209
10500.0	689.3	1.6	-14.3	29.5	873.2	546.0	260.0	1.000205
11000.0	676.4	.6	-16.5	26.5	860.0	544.9	263.6	1.000200
11500.0	663.7	.1	-18.9	22.3	845.4	544.2	267.2	1.000195
12000.0	651.1	-1.0	-19.4	23.0	832.7	543.0	269.7	1.000192
12500.0	638.9	-2.0	-20.0	23.7	820.2	541.7	269.9	1.000189
13000.0	626.7	-3.1	-20.6	24.4	807.6	540.4	267.8	1.000186
13500.0	614.3	-4.1	-21.3	24.8	795.5	539.2	265.6	1.000183
14000.0	603.0	-4.7	-22.1	22.1	782.2	537.4	267.1	1.000179
14500.0	591.4	-5.6	-22.6	24.8	769.7	537.4	263.9	1.000177
15000.0	580.1	-6.8	-20.9	31.3	756.0	535.1	273.1	1.000175
15500.0	568.8	-7.9	-20.5	35.4	740.4	534.7	281.2	1.000173
16000.0	557.7	-9.0	-20.3	39.6	735.1	533.4	283.9	1.000170
16500.0	546.9	-10.2	-20.1	43.7	723.9	532.0	280.4	1.000168
17000.0	535.2	-11.3	-20.6	46.1	712.8	530.0	280.7	1.000165
17500.0	523.0	-12.5	-21.6	46.4	701.9	529.2	280.9	1.000162
18000.0	510.3	-13.6	-22.5	46.7	691.1	527.8	285.6	1.000160
18500.0	505.1	-14.8	-23.6	45.9	680.0	526.4	284.2	1.000157
19000.0	493.0	-15.9	-25.6	42.8	669.8	525.1	283.5	1.000154
19500.0	480.1	-17.8	-28.2	36.3	658.9	523.9	282.9	1.000150
20000.0	475.4	-19.2	-29.3	35.0	648.5	522.5	282.3	1.000148
20500.0	465.3	-20.5	-30.2	41.0	638.0	521.0	281.6	1.000145
21000.0	455.9	-21.8	-31.4	41.2	628.0	519.9	274.6	1.000143
21500.0	447.7	-23.1	-32.6	41.3	619.1	518.7	277.5	1.000141
22000.0	437.7	-24.4	-33.7	41.5	609.0	517.5	277.0	1.000138
22500.0	428.5	-25.7	-34.9	41.6	599.2	516.3	276.5	1.000136
23000.0	419.3	-25.7	-34.9	41.6	590.4	515.9	275.3	1.000134

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

UPPER AIR DATA
0650060051
S M R

STATION ALTITUDE 3997.30 FEET MSL
26 MAR 79
1515 HRS MST
ASCENSION NO. 31

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TR)	WIN. DATA SPEED KNOTS	INDEX OF REFRACTION
23000.0	411.1	-27.1	41.8	581.8	611.2	270.1	48.4	1.000131
24000.0	402.6	-28.4	42.0	572.9	609.6	270.4	45.8	1.000129
24500.0	394.2	-29.6	40.5	563.7	608.1	270.8	44.0	1.000127
25000.0	385.9	-30.6	56.3	554.4	606.6	277.3	44.2	1.000125
25500.0	377.6	-31.9	54.7	545.2	605.2	277.3	45.9	1.000123
26000.0	369.6	-33.1	52.4	536.1	603.7	277.0	49.4	1.000121
26500.0	361.7	-34.2	50.1	527.2	602.3	277.0	51.1	1.000119
27000.0	353.9	-35.4	47.7	518.4	600.8	277.1	51.8	1.000116
27500.0	346.2	-36.6	46.9	509.8	599.2	277.2	53.5	1.000114
28000.0	338.6	-37.9	46.7	501.4	597.6	277.4	55.7	1.000112
28500.0	331.2	-39.2	46.5	493.2	595.9	277.5	56.5	1.000110
29000.0	324.0	-40.5	46.3	485.1	594.2	277.7	57.1	1.000109
29500.0	316.9	-41.8	46.1	477.1	592.6	278.1	55.6	1.000107
30000.0	309.2	-43.0	34.5**	469.0	591.0	278.4	54.3	1.000105
30500.0	302.9	-44.1	10.4**	460.8	589.6	278.5	54.8	1.000103
31000.0	296.1	-45.4		452.9	587.9	278.6	55.4	1.000101
31500.0	289.4	-46.8		445.4	586.1	279.5	57.9	1.000099
32000.0	282.8	-48.2		438.0	584.3	279.4	60.4	1.000098
32500.0	276.4	-49.6		430.7	582.5	278.2	60.6	1.000096
33000.0	270.0	-50.7		422.8	581.1	278.1	60.8	1.000094
33500.0	263.3	-51.3		415.1	579.6	277.8	60.3	1.000092
34000.0	257.6	-52.9		407.5	578.2	277.4	59.7	1.000091
34500.0	251.7	-54.0		400.1	576.7	277.2	60.3	1.000089
35000.0	245.8	-55.1		392.6	575.3	276.9	61.4	1.000087
35500.0	240.0	-56.1		385.2	573.9	276.8	62.6	1.000086
36000.0	234.3	-57.2		377.9	572.5	276.8	63.9	1.000084
36500.0	228.8	-58.3		370.6	571.1	276.6	65.3	1.000083
37000.0	223.3	-59.2		363.6	569.8	276.6	66.3	1.000081
37500.0	217.9	-60.1		356.4	568.6	276.3	67.4	1.000079
38000.0	212.7	-61.1		349.3	567.4	275.2	68.4	1.000078
38500.0	207.5	-61.9		342.3	566.2	274.1	69.5	1.000076
39000.0	202.5	-62.1		334.3	565.0	273.2	70.6	1.000074
39500.0	197.6	-62.2		326.4	563.9	272.4	70.4	1.000073
40000.0	192.8	-62.3		318.6	562.8	271.7	70.4	1.000071
40500.0	188.1	-62.4		311.0	561.6	271.3	69.9	1.000069
41000.0	183.9	-62.4		303.4	560.6	270.9	69.4	1.000068
41500.0	179.2	-61.6		295.1	560.0	270.2	69.4	1.000066
42000.0	174.6	-61.9		287.0	560.0	269.4	69.4	1.000064
42500.0	170.7	-60.2		279.1	560.0	268.6	70.2	1.000062
43000.0	166.6	-58.4		271.5	560.5	267.8	71.4	1.000060

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
22.4034 LAT DEG
106.42307 LON DEG

UPPER AIR DATA
005000 (01)
S M R

STATION ALTITUDE 3497.30 FEET MSL
26 MAR 79
1015 HRS MST
ASCENSION NO. 31

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR POINT DEGREES CENTIGRADE	REL HUM. PERCENT	DENSITY G/G CUBIC METER	SPEED OF SOUND METER	WIND DIRECTION DEGREES (T)	WIND SPEED KNOTS	INDEX OF REFRACTION
4350.0	162.6	-58.7		264.0	570.5	267.1	72.1	1.000059
4400.0	159.7	-57.9		250.6	571.5	268.6	72.4	1.000057
4450.0	156.6	-58.7		251.6	570.5	268.2	72.5	1.000056
4500.0	153.2	-58.7		245.6	570.5	268.0	72.2	1.000055
4550.0	147.5	-58.8		239.6	570.4	265.4	71.8	1.000053
4600.0	144.0	-59.0		234.0	570.1	265.8	72.2	1.000052
4650.0	140.6	-59.3		229.0	569.7	265.7	72.6	1.000051
4700.0	137.2	-59.5		223.6	569.4	265.7	72.9	1.000050
4750.0	133.9	-59.9		218.6	568.9	265.7	73.2	1.000049
4800.0	130.7	-60.7		214.3	567.9	265.6	73.3	1.000048
4850.0	127.6	-61.4		209.9	566.9	265.5	73.0	1.000047
4900.0	124.5	-62.1		205.5	565.9	265.5	72.8	1.000046
4950.0	121.5	-61.9		200.5	565.2	265.4	73.2	1.000045
5000.0	118.5	-61.4		195.0	565.0	265.4	73.7	1.000043
5050.0	115.7	-62.4		191.1	563.6	265.2	73.3	1.000043
5100.0	112.8	-63.6		187.6	564.0	265.0	72.1	1.000042
5150.0	110.1	-64.8		184.0	562.4	264.7	70.7	1.000041
5200.0	107.4	-63.7		178.0	563.8	264.2	68.6	1.000040
5250.0	104.8	-63.8		174.3	563.7	263.7	62.6	1.000039
5300.0	102.2	-64.3		170.5	563.0	263.3	60.4	1.000038
5350.0	99.7	-64.7		165.7	562.4	263.0	59.4	1.000037
5400.0	97.3	-64.2		162.2	563.1	263.1	59.5	1.000036
5450.0	94.9	-63.7		157.9	563.6	263.6	61.4	1.000035
5500.0	92.6	-63.2		153.7	564.4	264.7	62.6	1.000034
5550.0	90.4	-62.7		149.6	565.1	266.4	62.4	1.000033
5600.0	88.2	-62.2		145.6	565.8	268.1	62.0	1.000032
5650.0	86.0	-61.7		141.8	566.4	268.4	58.2	1.000032
5700.0	83.9	-61.5		136.3	566.3	269.6	54.3	1.000031
5750.0	81.9	-61.6		134.9	566.0	269.7	49.7	1.000030
5800.0	79.9	-61.8		131.7	566.4	269.1	44.5	1.000029
5850.0	78.0	-62.0		128.6	566.2	268.5	39.7	1.000029
5900.0	76.1	-62.1		125.9	565.9	268.7	36.0	1.000028
5950.0	74.3	-62.3		122.7	565.7	268.9	36.2	1.000027
6000.0	72.5	-62.5		119.6	565.5	269.3	35.5	1.000027
6050.0	70.7	-62.6		117.0	565.3	269.8	35.4	1.000026
6100.0	69.0	-62.6		114.2	565.3	270.3	35.2	1.000025
6150.0	67.3	-62.5		111.3	565.5	270.0	34.7	1.000025
6200.0	65.7	-62.3		108.6	565.0	269.7	34.2	1.000024
6250.0	64.1	-62.2		105.9	565.8	269.3	33.6	1.000024
6300.0	62.6	-62.1		103.3	566.0	268.0	33.1	1.000023

STATION ALTITUDE 3997.30 FEET MSL
26 MAR. 79 1515 HRS MST
ASCENSION NO. 51

UPPER AIR DATA
0850060051
5 M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
03500.0	01.1	-61.9			100.7	560.2	267.9	32.5	1.000022
04000.0	59.5	-61.8			98.2	560.6	268.0	31.4	1.000022
04500.0	59.1	-61.7			95.8	560.6	269.0	30.1	1.000021
05000.0	58.7	-61.5			93.4	560.7	269.0	28.9	1.000021
05500.0	55.4	-61.4			91.1	560.9	258.4	27.7	1.000020
06000.0	54.0	-61.2			86.8	567.1	253.4	26.7	1.000020
06500.0	52.7	-61.1			86.6	567.3	249.0	26.2	1.000019
07000.0	51.5	-61.0			84.5	567.5	249.0	26.1	1.000019
07500.0	50.2	-60.8			82.4	567.7	242.5	26.1	1.000018
08000.0	49.0	-60.6			80.3	568.0	243.0	25.8	1.000018
08500.0	47.8	-60.3			78.3	568.3	243.1	25.5	1.000017
09000.0	46.7	-60.1			76.3	568.7	247.2	25.1	1.000017
09500.0	45.6	-59.8			74.4	569.1	249.4	24.6	1.000017
10000.0	44.5	-59.5			72.5	569.4	251.7	24.1	1.000016
10500.0	43.4	-59.3			70.7	569.8	253.4	23.5	1.000016
11000.0	42.4	-59.0			68.9	570.1	253.3	21.7	1.000015
11500.0	41.4	-58.1			67.0	571.3	252.7	19.9	1.000015
12000.0	40.4	-56.7			65.0	573.1	251.6	17.8	1.000014
12500.0	39.5	-55.4			63.1	574.9	248.2	14.6	1.000014
13000.0	38.5	-54.1			61.3	576.5	243.0	11.5	1.000014
13500.0	37.6	-54.1			59.3	576.7	238.4	9.1	1.000013
14000.0	36.7	-54.2			58.3	576.4	235.2	8.3	1.000013
14500.0	35.9	-54.4			57.2	576.2	235.3	7.5	1.000013
15000.0	35.1	-54.6			55.9	576.0	239.7	7.6	1.000012
15500.0	34.2	-54.8			54.0	575.7	230.4	9.7	1.000012
16000.0	33.4	-54.7			52.3	575.8	257.1	12.1	1.000012
16500.0	32.7	-53.9			51.9	576.9	260.4	14.4	1.000012
17000.0	31.9	-53.0			50.5	576.0	262.5	16.4	1.000011
17500.0	31.2	-52.2			49.1	579.1	263.0	18.3	1.000011
18000.0	30.4	-51.3			47.0	580.2	264.3	19.5	1.000011
18500.0	29.7	-50.7			45.0	581.0	264.1	19.8	1.000010
19000.0	29.1	-50.4			43.5	581.4	264.0	20.1	1.000010
19500.0	28.4	-50.2			42.4	581.7	263.4	20.2	1.000010
20000.0	27.3	-49.4			42.3	582.1	261.4	19.9	1.000010
20500.0	27.1	-49.0			42.3	582.4	261.4	19.7	1.000009
21000.0	26.5	-48.4			41.3	582.5	259.3	19.0	1.000009
21500.0	25.8	-48.1			39.3	583.1	259.3	20.3	1.000009
22000.0	25.3	-48.3			38.4	583.5	258.4	20.5	1.000009
22500.0	24.7	-49.1			37.7	583.1	258.4	21.1	1.000009
23000.0	24.2	-50.0			37.7	583.1	257.3	21.2	1.000008

STATION ALTITUDE 2997.30 FEET ASL
 26 MAR. 79 1015 HRS MST
 ASCENSION NO. 01

UPPER AIR DATA
 0450060001
 S M R

GEOLITIC COORDINATES
 22.46034 LAT DEG
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GRAMS PER CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
83500.0	23.5	-50.4		36.9	581.5	243.9	21.4	1.000008
84000.0	23.1	-49.7		36.0	582.4	239.6	21.1	1.000008
84500.0	22.6	-49.0		35.0	583.3	234.9	20.4	1.000008
85000.0	22.0	-48.3		34.1	584.2	229.6	20.0	1.000008
85500.0	21.5	-47.6		33.3	585.1	229.3	20.0	1.000007
86000.0	21.1	-46.9		32.4	586.0	229.6	20.0	1.000007
86500.0	20.6	-46.2		31.6	586.9	232.6	20.1	1.000007
87000.0	20.1	-45.5		30.6	587.8	237.3	20.4	1.000007
87500.0	19.7	-45.3		30.1	588.1	239.1	21.4	1.000007
88000.0	19.2	-45.2		29.4	588.2	238.6	23.0	1.000007
88500.0	18.9	-45.1		28.7	588.3	237.4	25.1	1.000006
89000.0	18.4	-45.1		28.1	588.3	234.7	28.5	1.000006
89500.0	18.0	-45.0		27.4	588.4	232.9	31.6	1.000006
90000.0	17.6	-44.5		26.8	589.1	237.5	31.6	1.000006
90500.0	17.2	-43.6		26.1	590.3	242.2	31.7	1.000006
91000.0	16.8	-42.7		25.4	591.5			1.000006
91500.0	16.4	-41.7		24.7	592.0			1.000005
92000.0	16.1	-40.5		24.1	593.8			1.000005

STATION ALTITUDE 3997.30 FEET MSL
 26 MAR. 79 1515 HRS MST
 ASCENSION NO. 51

MRN SIGNIFICANT LEVEL DATA
 0850000051
 S M R

GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEODETICAL ALTITUDE DECAMETERS	DIRECTION DEG (TH)	SPEED MPS	WIND DATA		DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
			N-S MPS	E-W MPS		AIR DEG C		
2793.	9999.**	9999.**	-9999.**	-9999.**	99	-40.7	1.000+1	
2721.	235.	10.	9.	13.	99	-45.0	1.780+1	
2643.	238.	11.	6.	9.	99	-45.3	2.000+1	
2526.	245.	11.	5.	10.	99	-50.6	2.380+1	
2496.	252.	11.	3.	10.	99	-46.7	2.500+1	
2377.	264.	10.	1.	10.	99	-50.8	3.000+1	
2304.	256.	6.	1.	0.	99	-54.9	3.360+1	
2418.	242.	0.	3.	5.	99	-53.9	3.840+1	
2161.	253.	11.	3.	10.	99	-58.9	4.200+1	
2052.	242.	13.	6.	12.	99	-60.6	5.000+1	
1844.	270.	18.	-0.	18.	99	-62.7	7.000+1	
1727.	269.	29.	0.	29.	99	-61.4	8.460+1	
1624.	263.	31.	4.	30.	99	-64.8	1.000+2	

** WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 3997.30 FEET MSL
 26 MAR. 79
 ASCENSION A.G. 01

MANDATORY LEVELS
 0850060051
 S M R

GEOGETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4780.	18.3	-5.0	20.	220.1	14.4
800.0	6471.	13.2	-7.4	25.	230.8	18.2
750.0	8234.	8.2	-10.7	25.	248.8	17.2
700.0	10033.	2.5	-12.9	31.	260.4	18.7
650.0	12033.	-1.1	-16.5	23.	269.7	19.8
600.0	14113.	-4.9	-23.6	21.	267.5	27.6
550.0	16337.	-9.8	-20.2	43.	285.7	29.5
500.0	18725.	-15.4	-24.4	48.	283.7	39.2
450.0	21303.	-21.3	-31.0	41.	278.2	43.5
400.0	24117.	-28.8	-37.6	42.	276.5	45.1
350.0	27207.	-36.0	-43.2	47.	277.2	52.4
300.0	30653.	-44.6			276.8	55.0
250.0	34569.	-54.3			277.1	60.6
200.0	39163.	-62.2			272.8	70.2
175.0	41871.	-60.9			269.5	69.4
150.0	45042.	-58.6			265.9	72.1
125.0	48779.	-62.0			265.5	72.8
100.0	53281.	-64.8			263.0	59.6
80.0	57731.	-61.8			269.2	45.0
70.0	60500.	-62.7			270.0	35.3
60.0	63824.	-61.8			267.1	31.9
50.0	67333.	-60.8			242.1	20.1
40.0	71920.	-56.2			250.8	18.7
30.0	77932.	-50.8			264.2	19.7
25.0	81230.	-48.7			252.7	21.1
20.0	86717.	-45.3			258.1	20.4

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3997.30 FEET MSL
 26 MAR. 79 1515 HRS MST
 ASCENSION NO. 31

MRN MANDATORY LEVELS
 0050000051
 S M R

GEOGETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA		E-W MPS	DEW PT DEP LEG C	TEMPERATURE		PRESSURE MILLIBARS
			N-S MPS	N-S MPS			AIR DEG C	AIR DEG C	
2643.	238.	11.	6.	6.	9.	99	-45.3	-45.3	2.000+1
2490.	253.	11.	5.	5.	10.	99	-48.7	-48.7	2.500+1
2377.	264.	10.	1.	1.	10.	99	-50.8	-50.8	3.000+1
2192.	251.	9.	3.	3.	8.	99	-56.2	-56.2	4.000+1
2052.	242.	13.	0.	0.	12.	99	-60.8	-60.8	5.000+1
1939.	267.	16.	1.	1.	10.	99	-61.8	-61.8	6.000+1
1844.	270.	18.	-0.	-0.	18.	99	-62.7	-62.7	7.000+1
1782.	269.	23.	0.	0.	23.	99	-61.8	-61.8	8.000+1
1624.	263.	31.	4.	4.	30.	99	-64.6	-64.6	1.000+2
1487.	265.	37.	3.	3.	37.	99	-62.0	-62.0	1.250+2
1373.	266.	37.	3.	3.	37.	99	-58.6	-58.6	1.500+2
1276.	269.	30.	0.	0.	30.	99	-60.9	-60.9	1.750+2
1194.	273.	30.	0.	0.	30.	99	-62.2	-62.2	2.000+2
1054.	277.	31.	-2.	-2.	31.	99	-54.3	-54.3	2.500+2
934.	279.	28.	-4.	-4.	28.	99	-44.6	-44.6	3.000+2
829.	277.	27.	-3.	-3.	27.	07	-36.0	-36.0	3.500+2
735.	277.	23.	-3.	-3.	23.	09	-28.8	-28.8	4.000+2
649.	278.	22.	-3.	-3.	22.	10	-21.3	-21.3	4.500+2
571.	284.	20.	-3.	-3.	20.	09	-15.4	-15.4	5.000+2
492.	286.	15.	-4.	-4.	15.	10	-9.6	-9.6	5.500+2
430.	267.	14.	1.	1.	14.	19	-4.9	-4.9	6.000+2
367.	270.	10.	0.	0.	10.	18	-1.1	-1.1	6.500+2
307.	260.	9.	1.	1.	8.	15	2.5	2.5	7.000+2
251.	249.	9.	3.	3.	8.	19	8.2	8.2	7.500+2
197.	231.	9.	6.	6.	7.	21	13.2	13.2	8.000+2
146.	220.	7.	0.	0.	5.	23	18.3	18.3	8.500+2